

Title (en)  
Device, method and computer program for estimating a transfer function and corresponding noise suppressing apparatus

Title (de)  
Vorrichtung, Verfahren und Computerprogramm zur Schätzung einer Übertragungsfunktion und entsprechende Rauschunterdrückungsvorrichtung

Title (fr)  
Dispositif, procédé et programme d'ordinateur pour l'évaluation d'une fonction de transfert et appareil de suppression de bruit correspondant

Publication  
**EP 2149875 B1 20140507 (EN)**

Application  
**EP 09159108 A 20090429**

Priority  
JP 2008196943 A 20080730

Abstract (en)  
[origin: EP2149875A1] There are provided a transfer function estimating device that accurately estimates a transfer function of a sound from a given sound source to a listening position, a noise suppressing apparatus equipped with the transfer function estimating device, and a transfer function estimating method by the transfer function estimating device. A arithmetic processing module (2) obtains transfer functions at error microphones (8a,9a) based on tone signals and audio signals (5b) obtained by the error microphones (8a,9a) receiving a sound outputted from a sound source loud speaker (6a). A transform matrix table (5a) has the transfer functions at the error microphones (8a,9a) and a transform matrix for converting this transfer functions into given transfer functions registered therein. The arithmetic processing module (2) reads out a corresponding transform matrix from the transform matrix table (5a) based on the calculated transfer functions at the error microphones (8a,9a), and estimates transfer functions at actual listening points.

IPC 8 full level  
**G10K 11/178** (2006.01); **H04S 7/00** (2006.01)

CPC (source: EP US)  
**G10K 11/17815** (2017.12 - EP US); **G10K 11/17857** (2017.12 - EP US); **G10K 11/17875** (2017.12 - EP US); **G10K 11/17881** (2017.12 - EP US); **H04S 7/303** (2013.01 - EP US); **G10K 2210/1282** (2013.01 - EP US); **G10K 2210/30232** (2013.01 - EP US); **G10K 2210/3033** (2013.01 - EP US); **G10K 2210/3055** (2013.01 - EP US); **H04R 2499/13** (2013.01 - EP US)

Cited by  
CN102543096A; EP4362009A1; EP2725575A1; US9305541B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 2149875 A1 20100203; EP 2149875 B1 20140507**; CN 101640830 A 20100203; CN 101640830 B 20130501; JP 2010035044 A 20100212; JP 5092974 B2 20121205; US 2010027805 A1 20100204; US 8160264 B2 20120417

DOCDB simple family (application)  
**EP 09159108 A 20090429**; CN 200910137866 A 20090429; JP 2008196943 A 20080730; US 45317709 A 20090430